

**[4910-13]**

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Parts 121, 125, 135, and 145**

**[Docket No. 28293; Amendment No. 121-279, 125-35, 135-77, and 145-22]**

**RIN 2120-AF71**

**Service Difficulty Reports**

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Final rule, request for comments on the information collection requirements.

**SUMMARY:** The FAA amends reporting requirements for air carriers and certificated domestic and foreign repair station operators concerning failures, malfunctions, and defects of aircraft, aircraft engines, systems, and components. This action was prompted by an internal Federal Aviation Administration (FAA) review of the effectiveness of the reporting system and by air carrier industry concern over the quality of the data being reported. The objective of this final rule is to improve the reporting system to effectively collect and disseminate clear and concise safety information to the aviation industry.

**EFFECTIVE DATE:** January 16, 2001. Comments on the information collection requirements must be submitted on or before November 14, 2000.

**ADDRESSES:** Address your comments on the information collection requirements, in duplicate, to the Federal Aviation Administration, Office of the Chief Counsel, Attn: Rules Docket (AGC-200), Docket No. 28293, Room 915G, 800 Independence Avenue, SW, Washington, DC 20591.

**FOR FURTHER INFORMATION CONTACT:** Jose E. Figueroa, AFS-300, Flight Standards Service, Federal Aviation Administration, 800 Independence Ave., Washington, DC, 20591 telephone (703) 661-0522.

**SUPPLEMENTARY INFORMATION:**

**Availability of Rulemaking Documents**

You can get an electronic copy using the Internet by taking the following steps:

- (1) Go to the search function of the Department of Transportation's electronic Docket Management System (DMS) web page (<http://dms.dot.gov/search>).
- (2) On the search page type in the last four digits of the Docket number shown at the beginning of this notice. Click on "search."
- (3) On the next page, which contains the Docket summary information for the Docket you selected, click on the document number for the item you wish to view.

You can also get an electronic copy using the Internet through FAA's web page at <http://www.faa.gov/avr/arm/nprm/nprm.htm> or the Federal Register's web page at [http://www.access.gpo.gov/su\\_docs/aces/aces140.html](http://www.access.gpo.gov/su_docs/aces/aces140.html).

You can also get a copy by submitting a request to the Federal Aviation Administration, Office of Rulemaking, ARM-1, 800 Independence Avenue SW., Washington, DC 20591, or by calling (202) 267-9680. Make sure to identify the amendment number or docket number of this rulemaking.

**Availability of the Joint Aircraft System/Component (JASC) Code**

Copies of the Joint Aircraft System/Component (JASC) Code are available from the FAA's Regulatory Support Division (AFS-620), P.O. Box 25082, Oklahoma City, OK

73125, (405) 954-4391 or on-line from <http://av-info.faa.gov/isdr/SDRRelatedReferences.asp>.

### **Small Business Regulatory Enforcement Fairness Act**

The Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996 requires FAA to comply with small entity requests for information or advice about compliance with statutes and regulations within its jurisdiction. Therefore, any small entity that has a question regarding this document may contact their local FAA official, or the person listed under FOR FURTHER INFORMATION CONTACT. You can find out more about SBRFA on the Internet at our site, <http://www.gov/avr/arm/sbrefa.htm>. For more information on SBREFA, e-mail us [9-AWA-SBREFA@faa.gov](mailto:9-AWA-SBREFA@faa.gov).

### **Background**

On August 14, 1995, the FAA issued a notice of proposed rulemaking (NPRM) titled "Operational and Structural Difficulty Reports," Notice No. 95-12 (60 FR 41992). That document proposed to revise the reporting requirements for air carrier certificate holders and certificated domestic and foreign repair stations concerning failures, malfunctions, and defects of aircraft, aircraft engines, systems, and components.

The comment period for Notice No. 95-12 closed on November 13, 1995. Comments addressing numerous issues on the proposed rule were received from individuals, part 121 and part 135 certificate holders, aviation consulting firms, industry associations, manufacturers, and labor organizations. The FAA reviewed the comments and the changes recommended by the commenters. As a result, the FAA published a supplemental notice of proposed rulemaking, Notice No. 95-12A (64 FR 18766, April 15,

1999). This supplemental notice gave all interested parties an opportunity to comment on the revisions made as a result of the comments received on Notice 95-12.

The reports submitted by certificate holders and certificated repair stations, known as service difficulty reports (SDR's), provide the FAA with airworthiness statistical data necessary for planning, directing, controlling, and evaluating certain assigned safety-related programs. Currently, the Service Difficulty Reporting System (SDRS) is used in the following ways:

- FAA Analysis of SDR data:
  - To rapidly disseminate defect trends, problems, and alert information that could pertain to future aviation safety issues to appropriate segments of the aviation community and the FAA; and
  - To inform engineering offices within the FAA for evaluation of problems for potential use in preparing Airworthiness Directives (AD).
- FAA personnel requests for SDRS data:
  - Using SDR data as part of aircraft safety inspections;
  - Whenever there is an accident, the Office of Accident Investigation draws on this data;
  - Supporting investigations into accidents and incidents;
  - Disseminate safety data to the aviation industry, multiple government organizations, the public, the media, and legal communities; and
  - Used in Aviation Safety/Accident Prevention programs.
- National Transportation Safety Board (NTSB) personnel request data from the SDRS to assist in their accident investigations.

- There are numerous requests, from the media and legal community, for the SDR data.
- Foreign countries and branches of the U.S. military services use the SDR data for research.

### **Discussion of Comments and Modifications to the Proposal**

Eleven comments were received on the supplemental notice of proposed rulemaking (Notice No. 95-12A).

### **Structural Reporting Concerns**

One commenter interprets the proposed rule to mean that if a defect is found to be beyond the manufacturer's limits and is repaired in accordance with the manufacturer's repair manual, that defect is not reportable under the revised SDR reporting requirements.

FAA Response: The FAA disagrees with the commenter's interpretation. Section 121.704(a)(4) requires reporting of each the following: 1) any defect that leads to replacement, 2) any rework that exceeds the manufacturer's established allowable damage limits, 3) any defect in PSE's (Primary Structural Elements), or 4) repairs made in accordance with approved data not contained in the manufacturer's maintenance manual. Using the commenter's example, a report would be required under §121.704(a)(2) because the defect is found to be beyond the manufacturer's limits. The availability of the data in the repair manual has no bearing in this situation as the FAA wants reports of any defect that exceeds the manufacturer's established allowable damage limits. The FAA has made some minor editorial changes to the rule language.

Delta Airlines is opposed to reporting defects when a repair scheme for that defect is not contained in the original equipment manufacturer (OEM) manuals. Delta Airlines also states that they are against reporting defects when a repair scheme is contained in the

OEM manual. They believe that once a recurring problem has been addressed (through the development of a repair scheme), repetitive reporting of the same defect adds no value, unless the defect has recurred following the incorporation of the recommended terminating action or repair.

FAA Response: The FAA disagrees. Section 121.704(a) requires certificate holders to report the occurrence or detection of each failure or defect that exceeds OEM established limits, and failures or defects repaired in accordance with approved data not contained in the manufacturer's maintenance manual. Certificate holders are required to report occurrences to the FAA. The FAA will use data on occurrences to identify trends that have a negative affect on the continued airworthiness of aeronautical products; and may take action to ensure prompt and appropriate correction of design defects. It is important to receive reports of defects even if a method of repairing them is known and available. If the FAA did not receive reports of defects because they could be repaired, the FAA would not be aware that defects were being identified. One of the primary purposes of the SDR program is to warn of defects that could lead to unairworthy conditions. To accomplish that goal, the FAA must be aware of possible safety related issues.

### **Value of Service Difficulty Reports (SDR's)**

The Air Transport Association (ATA) and some of its membership have questioned the value of reporting the service difficulty data, stating that further expansion of the rule will not lead to any observable benefit for the enhancement of safety.

Airborne Express states that the existing service difficulty database serves little benefit. They believe that if any analysis is done based on this database, it is transparent

to the operators.

FAA Response: The Service Difficulty Reporting (SDR) Program's objective is to achieve prompt and appropriate correction of conditions adversely affecting continued airworthiness of aeronautical products. The SDR program allows for an exchange of information and provides a method of communication between the FAA and the aviation community concerning in-service problems. The consolidation, collation, and analysis of the data, and the rapid dissemination of trends, problems, and alert information to the appropriate segments of the aviation community and FAA, effectively and economically provide a method to ensure aviation safety.

Air Canada states that "it was our understanding that the basis for collecting this data was to provide a database that would substantiate the effectiveness of manufacturer developed bulletins and repairs." Air Canada also feels that new §121.704 is worded in general terms leading to more reporting of non-routine work tasks during heavy maintenance.

FAA Response: The SDR program was never intended to substantiate the effectiveness of manufacturer-developed bulletins and repairs. Although certain conclusions can be drawn from repeated reporting of defects that were supposedly fixed by the provisions of a service bulletin, the SDR program is predicated on reporting of the occurrence of defects.

The FAA created §121.704 to report defects occurring in structural items. Such reporting was not specifically required in the past. The rule language is designed to require reporting of specific items that are most likely to be found during a heavy maintenance check. The SDR program does not require the reporting of nonroutine work

tasks. The program only requires the reporting of defects when found.

American Airlines see SDR's as a very time consuming, labor intensive exercise, and may have little or no value.

FAA Response: In the past, the SDR database may not have been utilized to its fullest potential. Some reporting requirements were subjective, causing inconsistent reporting which could lead to analysis of incorrect data and errors in trend analysis. The FAA undertook this rulemaking effort to correct such deficiencies. The rulemaking is designed to provide more consistent data reporting that will lend itself to better data analysis.

The Air Line Pilots Association (ALPA), on the other hand, feels that the FAA has eliminated many reporting ambiguities found in the current rule language and believes that the FAA's proposal is clearer and will ensure more useful SDR reports. Also, comments received from the Association of Flight Attendants (AFA), and the International Association of Machinists and Aerospace Workers (IAM) indicate that the FAA has made significant improvements to the service difficulty reporting process.

Southwest Airlines states that Structural Item reporting proposed for heavy maintenance is totally unacceptable. They claim that this provision will require reporting service difficulties while the aircraft is still in-work, leaving the report "open" because all repair data are not available. The tracking and closure of open SDR's will impose an additional administrative burden on both Southwest Airlines and the FAA.

The ATA comments that the proposed rule will not provide the FAA with valuable safety information. Many reports will be submitted by the operators as "open" reports and specific repair information will not be available until the repair process is



completed.

FAA Response: The FAA disagrees. Any report of the failure, malfunction, or defect of an aeronautical product that causes or has the potential to cause a safety hazard is valuable safety information. The initial “open” (not complete with cause) report is valuable safety information and may be the first indication of a problem. Even an “open” report could alert other operators of a potential safety problem or a defect.

All of the required information may not be available when an original SDR is submitted. In such a case, when certificate holders operating under part 121, 125, or 135 get additional information concerning a required report, they must submit this additional information, from whatever source (including information obtained from the manufacturer, the certificate holder's internal maintenance organization, or a certificated repair station) in a supplemental report. If all of the required information were available when the SDR is submitted, the report would be an original closed ("OC") report. However, in those cases where all of the required information is not available, the certificate holder still must file an SDR within the required 96-hour time period and indicate on the SDR that the report is an original open ("OO") report. When the additional information is obtained, the certificate holder must file a supplemental SDR referencing the operator control number from the original report. The use of this number will ensure that the supplemental report can be traced to the original SDR. The certificate holder also should indicate whether the additional information closes (supplemental closed/"SC") the report or whether more information will be submitted and the report remains open (supplemental open/"SO"). Because certificate holders are required to submit supplemental SDR's, they should establish procedures for tracking "open" SDR's.

Air Canada claims that they have seen no demonstrated increase in safety as a result of mandatory service difficulty reporting.

FAA Response: The purpose of the SDR program is to receive reports of the occurrence of defects to alert the FAA, and subsequently the aviation industry, of the potential for widespread occurrences of those defects. The initial operator's report alerts the FAA of the potential for an airworthiness problem, and reports from multiple operators of the same defect could be an indication of a fleet-wide problem. The FAA analyses the reports it receives and places the report data in a database that is also analyzed. The FAA may determine that corrective action is required.

#### **Joint Aircraft System/Component (JASC) Code Codes versus Air Transport Association (ATA) Codes**

The ATA states that the use of the Joint Aircraft System/Component (JASC) code as proposed in §121.703(e)(7) would require future reports to include the JASC rather than existing ATA codes. The ATA codes, are the cornerstone and industry standard for technical data development and reporting. Also, Airborne Express states that the issue of the use of JASC coding versus ATA coding seems to have questionable benefit.

Delta Airlines disagrees with the use of JASC codes in place of ATA codes on the SDR form. Also, Southwest Airlines states that the requirement to use JASC coding is unacceptable. The usage of JASC codes would require reprogramming all computers and extensive training to adapt to the new coding system.

The Regional Airline Association (RAA) requests that the following provisions be deleted from §§121.703, 125.409, and 135.415: "The applicable Joint Aircraft System/Component Code and a unique control number for the occurrence in a form

acceptable to the Administrator." The RAA views the entry of the JASC Code as an optional field. The RAA further states that because the entry is administrative in nature, it should be recommended as a data entry field in an advisory circular (AC).

FAA Response: The existing rules do not specifically require the use of ATA codes on an SDR report. When reporting, however, the use of ATA Codes has become a routine practice that has proven to be effective for both industry and the FAA. Most of the SDR reports presently contain the ATA Code and the FAA attempts to add the ATA Code to the database when possible. The use of a specific code has proven to be very useful for tracking and analysis of problems. Thus, the FAA decided to require the use of such a code. The FAA originally planned to require the ATA Code; however, a lack of specificity in certain ATA Codes necessitated a broader code.

The JASC Code system was developed from the ATA coding system and is consistent with the ATA Code system. The ATA Codes do not always provide the necessary level of specificity for analysis. The JASC Codes merely expand on existing ATA Codes to give a more detailed picture of the condition. The users of the ATA Code should not need to significantly revise their procedures or systems to convert to the use of the JASC Code.

The Safety Analysis Section of the FAA's Flight Standards Service developed the JASC Code from the ATA Code with input from other civil aviation authorities. The JASC Code has been adopted by the Civil Aviation Authority of Australia and by Transport Canada.

### **The 96-Hour Requirement**

The ATA and Airborne Express comment that the requirement for operators to

submit SDR's within 96 hours after discovery of the defect rather than upon return to service of the aircraft places an additional burden on the airlines with questionable benefits.

American Airlines states that forcing air carriers to report structural type defects within 96 hours from the time of discovery, instead of from the time the aircraft returns to service, will cause an additional and unnecessary burden.

FAA Response: The reporting timeframe requirement in the existing rule (72 hours) and this revision to the rule (96 hours) has always been predicated on the time of discovery of the occurrence, not on return to service. The proposal did not change the triggering requirement. The initial report contains valuable safety information, as it may be the first indication of a problem. The initial report alerts other operators of the potential for problems. The change from a 72 to a 96-hour requirement will allow the operators additional time to complete the report and may reduce the number of incomplete (open) reports.

### **Additional Burdens**

Airborne Express comments on the undue burden to operators to control data on parts to meet the SDR reporting information requirement.

FAA Response: The FAA has determined that there is minimal burden on the operators due to this rulemaking action. Operators are already recording most of the information to document the airworthiness of the aeronautical product as required by other various regulations not part of this rulemaking. The revised rule specifies the need to report the manufacturer, manufacturer part number, part name, serial number, and location of the part. In the past, there was not a specific request for this information.

The Helicopter Association International (HAI) states that "proposed §§135.415(g), 135.416(f), and 145.79(e) permit certificated domestic and foreign repair stations to submit required SDR's, but do not require them to do so. Rather, the burden remains with the operator to submit the required reports or to supervise the efforts of the repair station to do so." The HAI believes that this allocation of responsibility is inappropriate.

Air Canada states that they "will be required to provide reporting on behalf of our customers."

FAA Response: The reporting responsibility ultimately lies with the certificate holder for the aircraft. However, a certificate holder could make arrangements with the repair station to submit the required reports. This arrangement would permit the repair station to submit the reports as the repair station discovers discrepancies during maintenance of the operator's equipment. If such an arrangement were made to meet the requirements, the repair station would submit the data required to be submitted by the operator. The FAA emphasizes that such arrangements are optional and that the details of such arrangements are contractual, not regulatory. The FAA emphasizes that the responsibility for the submission of the reports would always remain with the certificate holder of that aircraft. Other regulations, not affected by this rulemaking, specify the certificate holders' responsibility for supervising contract maintenance.

One purpose of the revised regulation is to reduce the possibility of duplicate reports when two separate certificate holders each bear responsibility for submitting SDR's. The FAA expects the operator and the repair station to reach an agreement so that one report is submitted to the FAA for each defect.

American Airlines also states that the new rule shifts the burden of reporting from the FAA Certificate Management Office to the industry and that the impact of removing the FAA from the reporting chain should be addressed.

FAA Response: The reporting burden has always been the responsibility of the operator. The local FAA offices will not be removed from the reporting chain, rather the reports will be transmitted to the FAA centralized collection point that is accessible to the Certificate Holding District Office (CHDO).

American Airlines states that the proposed rule expands the reportable incidents and they expect a significant increase in the number of SDR's submitted.

FAA Response: The FAA agrees. The FAA took the current SDR list of reportable items and determined which items were necessary for inclusion in the database. This resulted in approximately the same numbers of items to be reported; however, the list is now very specific as to which items must be reported. This will result in an increase in the number of reports.

American Airlines believes that reporting malfunctions or defects occurring during ground operations is unnecessary and is an additional burden. They also suggest that reporting engine shutdowns during either ground or flight operations will cause confusion.

FAA Response: The FAA disagrees. The revised rule clarifies that a failure, malfunction, or defect is required to be reported regardless of what stage of operation the discovery occurred because such an incidence could indicate a system malfunction or fault that may affect safety of flight.

## **Reportable Items**

Airborne Express questions why a defect covered by the minimum equipment list (MEL) must to be reported when there is no apparent unsafe condition in the operation of the aircraft.

FAA Response: If an item that is listed on the MEL for that aircraft fails, the operator may temporarily continue to operate the aircraft. However, the SDR program is designed to capture failure occurrences. In some cases an identical part that may not be on the MEL list for other aircraft could be subject to the same failure. The FAA needs to know if an item is failing, regardless if the aircraft may still be capable of safe flight. The repeated failure of an item, whether listed on the MEL or not, is of particular interest to the FAA and industry.

Delta Airlines states that they are against reporting unscheduled engine removal.

FAA Response: The proposal did not address the Mechanical Interruption Summary Report provisions that contain the requirement for reporting unscheduled engine removal. The FAA removed from §121.705 only those items that were duplicated in the SDR's and did not change the remainder of the §121.705 requirements. The reporting of unscheduled engine removal facilitates the continued compilation of data for preparation of the FAA's Air Carrier Aircraft Utilization and Propulsion Reliability Report.

Delta Airlines states that they currently provide continuous electronic access to Mechanical Interruption Summary data and; therefore, should not be required to comply with a monthly reporting requirement.

FAA Response: The FAA disagrees. The FAA does not have the resources to

monitor the certificate holder's database on a continual basis. In addition, the FAA is responsible for the oversight of a large number of certificate holders and needs the information submitted in summary format.

Southwest Airlines states that proposals to change the language of “§121.703(a)(13) to include reporting of flight control seals, pulleys, cables, brackets, hardware, chafing, rubbing, rigging, etc. are unacceptable.”

FAA Response: The provision Southwest Airlines refers to is found in §121.703(a)(12). The FAA's intent was to record events during aircraft operation, i.e. uncommanded movements of flight controls while engaged in autoflight and autothrottle operations. The FAA did not intend for the certificate holder to report the expected wear and tear of items such as cables, seals, pulleys, etc. The commenter did not provide evidence to support the claim that these reporting requirements are "unacceptable."

British Aerospace Regional Aircraft (BAeRA) states "that in our experience that (sic) airlines who are required to provide FAA SDR reporting rarely also provide safety event information direct to BAeRA, either in parallel or in addition to the required FAA SDR reporting. " The BAeRA states "that it would be of benefit, both in terms of timeliness and ensuring that any safety event is considered in the context of all aircraft of that type, if the airlines were required to inform or provide copies of all SDR's direct to the aircraft manufacturer in parallel with their submission to the FAA."

FAA Response: The FAA disagrees. The SDR database is and has been available to the aviation industry and manufacturers through the publicly available reports. These reports are available on the Internet. The SDRS will allow the public access to information much quicker than in the past.



## **Redundant Reporting**

Airborne Express feels that these proposed rules include redundancies, such as the requirement to report similar information to the Reliability Programs and the SDR program.

FAA Response: The FAA agrees that reliability programs capture similar defect data; however, not all part 121 operators have approval to use a reliability program, and data from these programs are not shared universally amongst operators. If operators with reliability programs were excluded from the requirement to submit SDRs to the database, the database would be incomplete (only show part of the potentially affected aircraft fleet), and the occurrence of defects for some aircraft would go unreported even though the defect could occur in another operator's fleet.

American Airlines states that "the value of the expanded structural reporting requirement must be questioned. The industry already gathers and reports structural repair data mandated by Airworthiness Directives (AD). Reporting this information under the SDR program seems to be a duplication of effort. This duplication is not addressed in the NPRM and should be considered by the FAA before any final rule is put into effect."

FAA Response: The FAA contends that, in general, AD's do not require the same reporting of structural repair data. The AD reporting requirements, while containing some information common to the SDR system, usually request information that is different from the information collection required for the SDR system. Also, the reported AD information is used for reasons other than the analysis function of the SDR database. As an example, the "aging aircraft" information reported by certificate holders for an AD

is submitted to the appropriate FAA Aircraft Certification Office to determine the extent of aircraft deterioration because of age, and to monitor the effectiveness of the supplemental inspection documents and corrosion prevention and control programs. Information submitted to the SDR's is used for the identification of recurring service problems.

### **Electronic Submission of SDR's**

American Airlines feels that mandating the reporting of SDR's in an electronic format will result in an unnecessary burden and additional costs. The commenter further states that the reporting of SDR's is a complex process for part 121 certificate holders. "Revamping the present reporting system, training numerous employees in a new unneeded process, and changing the culture in our company will cause a tremendous burden on American Airlines." Also, American Airlines suggests that the FAA may have unnecessarily burdened part 121 certificate holders by requiring them to report SDR's in an electronic format when other certificate holders have the option of using electronic reporting.

FAA Response: The FAA has determined that electronic submission of SDR's could permit a more timely dissemination of safety information. The FAA instituted a test electronic SDR reporting system several years ago to determine if electronic reporting was feasible. At this time, several similar sized part 121 operators are voluntarily submitting reports electronically via the Internet. Although the electronic reporting system appears to work, the FAA requested comments on a proposal to make electronic reporting mandatory. Most of the commenters raised concerns with mandating electronic reporting. The FAA has decided to allow the option of electronic reporting but will not

make it mandatory at this time. The rule language has been revised to reflect that electronic reporting is optional.

American Airlines also states that to mandate a part 121 certificate holder to use an IBM-compatible computer, is as ludicrous as a part 121 carrier requesting that the FAA purchase and use a Macintosh computer so equipment used by the FAA can be compatible with equipment used by the part 121 certificate holder. Delta Airlines states "that the proposed rule places the full burden (logistics, economics, programming, etc.) on the operators to conform to the Administrator's electronic format and its future revisions."

FAA Response: After further consideration, the FAA has determined that due to the potential for lack of computer compatibility and the current lack of a universally accepted protocol, the mandatory electronic submission of reports would increase the burden on the FAA and industry. Therefore, electronic submission of reports will be optional. The FAA is using the Internet standard as a means of receiving electronic SDR's that in effect resolves platform incompatibility issues such as Macintosh computer devices if an operator prefers to submit reports electronically.

The Regional Airline Association (RAA) and Southwest Airlines support the use of electronically submitted SDR's. The RAA recognizes that the SDR system will become a more effective tool for tracking and analyzing mechanical malfunction trends. In the past, the air carriers provided the SDR data to the FAA on paper and the FAA in turn published the data in huge paper documents several months later.

Delta Airlines states that §121.705 should allow for reporting by other means acceptable to the Administrator.

FAA Response: The rule language has been changed to permit the SDR's to be submitted on a form or in another format acceptable to the Administrator. The FAA has developed a paper form that includes blocks for all the required reporting information. The FAA's Aviation Data Systems Branch (AFS-620), P.O. Box 25085, Oklahoma City, OK 73125, telephone number (405) 954-4391, will assist any operator with resolving compatibility and format issues should the operator desire to undertake electronic reporting.

### **Expansion of Reportable Items**

American Airlines states that fuel spills caused by overfilling the tanks would now become reportable.

Southwest Airlines states that "the expansion of reportable items §121.703(e) includes fuel and fuel dumping systems that could cause hazardous leakage will include fuel leakage during installation of components, static leaks, and fuel spills during the fueling of aircraft. This is unacceptable because a misinterpretation of this rule will cause enforcement problems with certain inspectors."

FAA Response: The provision to which Southwest Airlines refers is found in §121.703(a)(7). Fuel spills during refueling are not considered reportable under this rule unless an aircraft system failure, malfunction, or defect caused the fuel spill.

Airborne Express feels that exceptions to the rule should be allowed for events occurring during the course of maintenance. Due to the potential for maintenance to introduce defects as systems are disturbed, there needs to be consideration given to exclusion of these events during maintenance. American Airlines states that the new rule will require the reporting of fuel leaks during heavy maintenance when leaks occur after

assembly.

FAA Response: An event occurring during the performance of maintenance that was induced by the maintenance action does not constitute a reportable defect if detected and corrected as part of that maintenance action. Using the Airborne Express' example, in the course of a mechanic replacing a bracket, where the maintenance-induced action of causing an associated fastener to loosen or break that results in a fuel leak would not necessarily mean that the leak would have to be reported to the SDR program. The SDR program is designed to track defects, not disturbances of parts due to maintenance. After completion of the related maintenance task, the aircraft is returned to service. During the subsequent operation of the aircraft, if the bracket should fail and cause a fuel leak, this leak would have to be reported to the SDR program.

American Airlines has concerns with the reporting of failures, malfunctions, or defects associated with emergency evacuation systems or components. This commenter states that reports on the failure of emergency lighting or the degradation of emergency egress lighting batteries should be excluded from the reporting requirements. The commenter states that high maintenance components do not render the system inoperable, nor add value to the SDR database.

FAA Response: The FAA disagrees. The current rules pertaining to the reporting of the described failures provide the FAA with an indication of evacuation system reliability and the reliability of components within evacuation systems. The FAA contends that if an evacuation slide has an on-aircraft life of 12 months, the components within that slide should last 12 months. Failure of batteries for a slide's emergency egress lighting may indicate a need to change maintenance procedures or life limits.

American Airlines states their opposition to the requirement to report hours and cycles of the affected components due to the additional research time burden that would be imposed, and that if the rule goes into effect as proposed, that the reporting time be increased to 10 days. Also, Southwest Airlines states that the expansion of the list of reportable data, §121.703(e), to include reporting time and cycles of affected components, will impose additional time and manpower requirements due to some information that will have to be collected from vendors is unacceptable. Also, Delta Airlines disagrees with the new requirement to report manufacturer, name, time, and cycles of components.

FAA Response: The FAA disagrees. The FAA has made the manufacturer's name, total time, and total cycle information a mandatory requirement. The FAA requires this information so a more complete analysis of the component failure trends can be made.

One commenter has two problems with the SNPRM: the inclusion of aircraft total time and total cycles for each report, and station and flight numbers should be required. The commenter strongly supports the rest of the proposal.

FAA Response: The flight number and station where the failure, malfunction, or defect was detected is not necessary to determine the cause of the failure. This information is available through the maintenance records if needed.

The International Association of Machinists and Aerospace Workers (IAM) and the Association of Flight Attendants fully support the proposed rule changes and support the additional requirement that aircraft total time and total cycles be recorded. Furthermore, the IAM believes the station and flight number should be included as part of the report to permit tracking of particular problems occurring at a specific station or

airport.

### **Public Aircraft Concerns**

Delta Airlines suggests that "the rule should include Public Aircraft."

FAA Response: The FAA has not exercised the authority to mandate that operators of public aircraft submit SDR reports; however, the FAA encourages those operators to participate in the SDR program.

### **Miscellaneous Comments**

American Airlines states that the new rule requires redundant reporting of failures, malfunctions or defects of the autothrottle, autoflight or flight control systems as these defects are already reportable under current §121.703(c). Delta Airlines suggests that the word "uncommanded" be added to the list of reportable flight control items in §121.703(a)(12).

FAA Response: Although such events could be reported under current §121.703(c) or §135.415(c), the SDR database does not indicate that such reports are being made. The FAA has become aware that failures of this nature are occurring. Therefore, the FAA has added a specific requirement to report failures, malfunctions, or defects of autothrottle, autoflight, or flight control systems or components in §121.703(a)(12). The assumption is that any uncommanded system activation is the result of a malfunction, failure, or defect.

Delta Airlines suggests that the wording "in its opinion" not be deleted from existing §121.703(c). According to Delta, "the deletion would remove any flexibility in reporting and increase enforcement problems with inspectors who have various interpretations of the rule."

FAA Response: The FAA disagrees. Section 121.704 has been modified by listing specific items to be reported. Flexibility in reporting has been a problem with the SDR database. The revised rule will require specific reporting so that a quality analysis can be performed.

Southwest Airlines states that “changes added to §121.703(a)(11) included all exit door defects, malfunctions, or failures. Additionally, this includes door trim, window shade panels, and other cosmetic and or secondary structure on doors.”

FAA Response: Some items may have been installed for “cosmetic” reasons. However, using the commenter's example, opening a window shade panel during an aircraft emergency evacuation is necessary to allow one to look out the window of the exit to determine whether that exit is safe to use. If a shade is defective and cannot be opened, the crew or a passenger might not be able to determine if there is a fire outside the aircraft. Similarly, a door trim item that is defective may jam the door in an emergency. For these reasons, defects of these items must be reported as part of the SDR program.

The RAA requests that the supplemental reporting provisions of §§121.703(i), 125.409(i), and 135.415(i) be rewritten as follows: “When a certificate holder gets additional information concerning a report required by this section, the certificate holder shall expeditiously submit that information as a supplement to the original report unless the previously submitted information is sufficiently descriptive for analysis of the failure, malfunction or defect.”

FAA Response: The FAA agrees in part. The rule requires that the occurrence of the defect be initially reported within a 96-hour time frame. The FAA realizes that in



some instances all the required information to complete the report may not be available within this time frame. The purpose of the supplemental report is to allow the operator to submit the information when it becomes available in order to complete the report. The important point is that the FAA be notified of the occurrence or detection of the defect.

In order to clarify what additional information is required in supplemental reporting, §§121.703(i), 121.704(h), 125.409(i), 125.410(h), 135.415(h), and 135.416(h) have been revised as follows: "When a certificate holder gets supplemental information to complete the report required by this section, the certificate holder shall expeditiously submit that information as a supplement to the original report and use the unique control number from the original report." A report is only complete when all the required information is submitted to the FAA.

The RAA requests that the word "component" in §§121.703(e)(9), 125.409(e)(9), and 135.415(e)(9) be revised to "component part" and that provision (e)(10) be deleted.

FAA Response: The FAA disagrees. As stated in the proposal, the FAA revised these sections to require that the information be provided for the component that failed, malfunctioned, or was defective, if applicable. In some instances, it may be possible to further identify the specific part, within that component, that failed malfunctioned, or was defective. This provision (tracking down to the part level) is a major change from existing practice.

The RAA also requests that the following provisions be deleted from §§121.704, 125.410, and 135.416: "...a unique control number for the occurrence, in a form acceptable to the Administrator."

FAA Response: The FAA disagrees. The FAA needs an identifiable field to track

SDR's. The use of the unique control number will reduce the number of duplicate reports for the same occurrence in the SDR database and provide a more simplified method for the FAA and industry to reference an SDR.

The Helicopter Association International states that the corrosion reporting requirements of §§135.416(a)(1) and (a)(2) are superfluous from a safety perspective and that these provisions will prove unduly burdensome in certain environments. The HAI urges the FAA to delete proposed §§135.416(a)(1) and (a)(2).

FAA Response: The FAA disagrees. Sections 135.416(a)(1) and (a)(2) apply to all aircraft. The FAA feels that helicopters are susceptible to the same conditions as most fixed wing aircraft.

Delta Airlines states "we know of no data to suggest a data link between autothrottle/autoflight systems and uncommanded control inputs."

FAA Response: The FAA disagrees. There have been two air carrier accidents in the United States that immediately followed unexplained airplane rolls. The FAA is aware of other roll, pitch, or yaw events that have occurred, although reports are not always made to the SDR's. The FAA notes that some of these events have required full deflection of the flight controls to regain control of the aircraft. Other events have occurred involving ice in autopilot actuators, which prevented the actuators from disengaging when the autopilot was disengaged.

Although such events could be reported under existing §121.703(c) or §135.415(c), the SDR database does not indicate that such reports are being made. Therefore, the FAA has added a requirement to report failures, malfunctions, or defects of autothrottle, autoflight, or flight control systems or components in §§ 121.703(a)(12),

125.409(a)(12), and 135.415(a)(12).

The Air Line Pilots Association supports the intent of the proposal and feels that the FAA has eliminated many reporting ambiguities found in the old language. The ALPA believes the proposed changes have made the rule language more clear and will result in more useful reports. Comments received from the AFA and IAM also indicate that the FAA has made significant improvements to the service difficulty reporting process.

### **Summary of Economic Comments**

This section will summarize the economic comments and FAA's responses. A detailed discussion of these comments and responses is contained in the full evaluation in the docket for this rule. A total of 8 commenters raised economic issues.

Costs - The economic analysis attributed relatively minor costs to the operators as a result of the SNPRM. Commenters believe that the analysis was wrong in many areas:

Several commenters stress that switching from ATA codes to JASC codes will be costly.

FAA Response: The major difference between the ATA and the JASC codes are that the latter includes more detailed description of aircraft systems and components. Hence, the air carrier operators will only need to obtain the new documentation and not need to retrain their employees, resulting in de minimus costs.

A trade organization claims that the proposed rule would mandate additional fields for the data to be sorted; these additional fields would need to be provided at the expense of the air carriers. This organization estimates that the JASC code and unique control number would add at least 5% to the air carrier's processing costs.

FAA Response: Given the similarities between the JASC code and ATA code and given that operators will always have to generate a control number, the FAA does not believe that these will add 5% to processing costs.

Five commenters believe the number of SDR's will drastically increase, possibly at least double.

FAA Response: The FAA is increasing the number of variables that need to be reported about each defect. To be conservative, the FAA will base costs in the final rule on a 45% increase in SDR's due to the new paragraphs.

The answer to the previous comment has cost implications; air carriers would have to hire additional personnel.

FAA Response: The existing rule only requires that the data be sent to the certificate holder's District Office. Any changes in how these air carriers report information is based on their internal operating procedures, rather than changes in the rule.

Four commenters claim that the requirement to adjust the process from filing the time the aircraft returns to service to 96 hours from the time of discovery will increase their labor costs with questionable benefits.

FAA Response: The current rule has been for operators to report within 72 hours from the time of discovery rather than from the time the aircraft returns to service. The FAA is making this process less burdensome by changing the 72 hours to 96 hours.

One air carrier claims that, in order to continue to process SDR's with their Macintosh computer, they will incur additional hardware and service maintenance costs.

FAA Response: Since the economic evaluation for the SNPRM was written, the

FAA has changed its operating procedures. Operators can now submit the required information using the Internet and will not need to purchase software to allow Macintosh computers to interface with an IBM-compatible system.

Several commenters are unhappy about the mandated electronic filing, as this would have cost implications.

FAA Response: The FAA modified the requirements so that electronic filing will not be mandatory.

One air carrier notes that the NPRM is moving the reporting burden from the FAA Certificate Management Office (CMO) to the industry; by removing them from the process, the responsibilities now falls on the carriers.

FAA Response: The regulatory burden has always been on the industry to review and report the data. Hence, removal of the CMO will not place any new regulatory burdens on the industry.

Several commenters were uncomfortable with the FAA's estimate that "on average, it would cost each individual air carrier \$15 per year and each repair station \$1 per year," saying that the SDR program costs air carriers much more per year.

FAA Response: To obtain these values, the FAA divided the cost of the proposed changes by their applicable industry group. The FAA did err in not making it clear that these average annual costs were for the changes to the proposed rule rather than the entire cost of the SDR program.

In sum, most of the commenters believe that the costs were very much undervalued.

FAA Response: The FAA has reviewed the regulatory evaluation based on industry comments and has determined that the rule does not impose major additional costs to the industry. The FAA removed the proposed requirement for part 121 carriers to file electronically, which should reduce costs over what was reported in the SNPRM analysis.

Benefits - Almost all of these commenters were unanimous in believing that the overall benefit of the SDRS is dubious at best and that the added costs do not justify the increase in benefits. Different commenters claimed that:

- the SDR system is seldom used in the decision making process either because the SDR information comes too late or the data is unworkable;
- the new requirements will not provide the FAA with valuable ‘safety’ information;
- there are no real benefits to offset the costs imposed by data collection. In addition, there has been no demonstrated increase in safety as a result of mandatory reporting;
- reporting SDR’s is a time consuming and labor intensive exercise that has little or no value, and there is no assurance that the increase in data will result in any safety gain; and
- the costs of reporting alone will far outweigh any benefits. The practical utility of the current information collection for SDR’s is negligible.

FAA Response: The FAA disagrees with these comments. The improved SDRS will provide the FAA with airworthiness statistical data necessary for planning, directing, controlling, and evaluating certain assigned safety-related programs. The reporting system provides FAA managers and inspectors with a means for monitoring the effectiveness of self-evaluation techniques being employed by certain segments of the

civil aviation industry. In addition, information submitted to the SDRS is used for the identification of recurring service problems.

### **Regulatory Evaluation Summary**

Changes to Federal regulations must undergo several economic analyses. First, Executive Order 12866 directs that each Federal agency shall propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs. Second, the Regulatory Flexibility Act of 1980 requires agencies to analyze the economic effect of regulatory changes on small entities. Third, the Trade Agreements Act (19 U.S.C. §§ 2531-2533) prohibits agencies from setting standards that create unnecessary obstacles to the foreign commerce of the U.S. And fourth, the Unfunded Mandates Reform Act of 1995 (Pub. L. 104-4) requires agencies to prepare a written assessment of the costs, benefits, and other effects of proposed or final rules that include a Federal mandate likely to result in the expenditure by State, local, or tribal governments, in the aggregate, or by private sector, or \$100 million or more annually (adjusted for inflation).

In conducting these analyses, the FAA has determined that this rule is not "a significant regulatory action" under section 3(f) of Executive Order 12866 and, therefore, is not subject to review by the Office of Management and Budget. The rule is not considered significant under the regulatory policies and procedures of the Department of Transportation (44 FR 11034, February 26, 1979). This rule will not have a significant impact on a substantial number of small entities and will not constitute a barrier to international trade.

### **Cost of Compliance**

The FAA has estimated the expected costs and benefits of this regulation. In this analysis, the FAA estimated costs for a 10-year period, from 2001 through 2010. The present value of this stream was calculated using a discount factor of 7 percent as required by the Office of Management and Budget (OMB). All costs in this analysis are in 1998 dollars.

Sixteen of the section changes will increase costs; the changes in fifteen of them will add additional reporting requirements for information that has not been collected before or had been collected through voluntary reporting. Accordingly, since there is little or no historical data on the data collection and reporting requirements, the FAA does not know how many extra reports these new requirements will generate. For these changes, the FAA believes that there will be few additional new reports and that the overall burden will be minimal. However, based on comments and the need to provide the public with an estimation of the potential total impact of these paragraphs, the FAA assumed that each of these changes will increase the total number of SDR's processed each year by three percent. Over ten years, these costs sum to \$2.46 million (present value, \$1.73 million).

Sections 121.703(g), 121.704(f), 125.409(g), 125.410(f), 135.415(g), and 135.416(f) will permit part 121, 125, and 135 certificate holders to authorize a repair station to submit an SDR on their behalf. Sections 145.63(e) and 145.79(f) will require that the repair stations provide a copy of the report submitted by the repair station to the part 121, 125, or 135 certificate holder on whose behalf the report was submitted. These sections will result in increased costs for the repair stations. However, these sections will also allow for cost savings by eliminating duplicate reports; repair stations will submit the



report for input into the SDRS that is currently submitted by both repair stations and air carriers.

The elimination of the air carrier operator's duplicate report will not diminish safety. The SDR system is used to spot equipment malfunction trends and to get an overview of airplane mechanical malfunctions by fleet type; they are not intended to give an operational view of what is wrong with an operator's individual airplane. Based on the existing regulations, before an airplane can be put back into service, the air carrier will need to be aware of what was wrong and what corrective actions were taken. Alleviating the air carrier operator of the responsibility of submitting an SDR in this case does not lessen the information that the air carrier will have about their aircraft.

There were 2,600 SDR's from repair stations that were entered into the SDR database that were also submitted from air carriers in 1998. Each report will need to be sent from the repair station to the air carrier. Since repair stations may now do all of the reports, the FAA assumes in this analysis that half of this number of reports is the maximum number that will not have to be generated and processed in the SDR system under this section. The FAA assumes in this analysis that all reports are photostated and mailed. Over ten years, the costs of these reports will be \$35,400 (present value, \$24,800).

Total quantifiable costs, over ten years, sum to \$2.49 million (present value, \$1.75million).

Sections 121.703(d), 125.409(d), and 135.415(d) may reduce the Principal Maintenance Inspector's (PMI) workload. Currently, all reports go from the certificate holder to the Flight Standards District Office (FSDO) where the PMI spends time

reviewing the SDR before forwarding it to the SDRS in Oklahoma City. The rule will require certificate holders and operators to submit these reports directly to Oklahoma City, thus possibly reducing the PMI's workload. The certificate holder or operator will be required to make the SDR data available to the FSDO for examination. Hence, while the PMI can still remain informed, he or she may not have to spend as much time inspecting each report and will not have to forward the material. Over ten years, this cost savings will be \$1.40 million (present value, \$981,000).

Sections 121.703(e)(13), 121.704(d)(9), 125.409(e)(13), 125.410(d)(9), 135.415(e)(13), and 135.416(d)(9) will add a requirement that an SDR include a unique control number for each occurrence. These sections will yield cost savings which will come from both the reduction in the number of duplicate reports for the same occurrence in the SDR database and from the more simplified, methodical method for the FAA and industry to reference an SDR. Traditionally, when a supplemental report was submitted to the SDRS, it was entered as if it were a separate report, thus making it difficult to link it to the original report. Using a unique identification number for each occurrence will reduce the total number of reports within the SDRS. The potential cost savings will be based on the reduction in the amount of time spent to find and link these reports within the SDRS. Going on the assumption that no certificate holder currently is using unique control numbers, over ten years, the cost savings will be \$140,500 (present value, \$98,700). However, the actual cost savings will almost certainly be lower because some certificate holders are already using a control number.

Sections 121.703(g), 125.409(g), and 135.415(g) will reduce dual reporting. When a repair station identifies a failure, malfunction, or defect, this information is

currently being reported by both the repair station and the certificate holder or operator. Therefore, information about the same problem may be reported twice to the FAA. This revision is intended to eliminate these duplicate reports. The final rule will require that the part 121, 125, or 135 certificate holder or operator receive a copy of the report submitted by the repair station (these costs were covered above). Cost savings will accrue, for each repair, due to one less report needing to be processed. Over ten years, this cost reduction will be \$173,200 (present value, \$121,600).

Total cost savings over 10 years sum to \$1.71 million (net present value, \$1.20 million). The rule's net costs sum to \$781,200 (present value, \$548,600). Net cost savings could be change due to two factors:

- Net costs could be lower if the number of additional reports due to the new reporting requirements is less than the assumed 45% increase in total reports. Indeed, if this increase in reports were less than 32%, this rule will yield net cost savings; and
- Net costs could be higher because the cost savings from using a unique control number almost certainly will be less than the amount discussed above (but the FAA does not have the data to determine how much more it will be).

### **Analysis of Benefits**

The use of a unique control number will help reduce the possibility of duplicate SDR reports being entered into the SDR database. In addition, the additional time from discovery for submitting reports should reduce the number of supplemental reports filed. A more efficient system will preserve and improve the integrity of the database and allow for better and more complete analysis by the FAA and other users of the data. Additional

specific benefits of these rule changes include standardizing reporting requirements for air carriers, which allows for more consistent data.

The regulations will enhance air carrier safety by collecting specific data that identify mechanical failures, malfunctions, and defects that may be a hazard to the operation of an aircraft. The information collected can be used to develop and implement corrective actions to help prevent future occurrences of these failures, malfunctions, and defects.

As noted above, the SDR system is used to identify trends and to provide an overview of product service data. Identifying these trends can help to catch problems early, which would allow Airworthiness Directives to be based on better information. In addition, an SDR will give an operator the ability to use trend information (and knowledge of potential problems) to better plan its maintenance scheduling, a major benefit for airplane operators. The FAA believes that because of the improved SDR information resulting from these regulations, additional information and equipment malfunction trends can be identified that will lead, over time, more timely corrective action by the FAA, and hence, to safer airplanes.

### **Comparison of Costs and Benefits**

This rule will result in costs of \$828,400 (net present value, \$581,800). Duplicate reports, as well as duplicate entries in the SDRS, will be reduced. In addition, the regulations will enhance air carrier safety by collecting additional and more timely data that identify mechanical failures, malfunctions, and defects that may be a hazard to the operation of an aircraft. This data can be used to identify trends, which could help to

catch problems early and to better plan maintenance scheduling. All of this could lead, over time, to safer airplanes.

The FAA believes that these benefits exceed the rule's net costs, and hence, finds this rule to be cost beneficial.

### **Regulatory Flexibility Determination**

The Regulatory Flexibility Act (RFA) of 1980, 5 U.S.C. 601–612, directs the FAA to fit regulatory requirements to the scale of the business, organizations, and governmental jurisdictions subject to the regulation. We are required to determine whether a proposed or final action will have a "significant economic impact on a substantial number of small entities" s defined in the Act. If we find that the action will have a significant impact, we must do a "regulatory flexibility analysis."

For this rule, the small entity group is considered to be part 121, 125, and 135 air carriers (Standard Industrial Classification Code [SIC] 4512) and part 145 repair stations (SIC Code 4581, 7622, 7629, and 7699). The FAA has identified a total of 98 part 121 air carriers, 2,118 part 125 and part 135 air carriers, and 2,790 part 145 repair stations that would be considered small entities.

These regulations will cost all small air carriers \$2.08 million (present value, \$1.46 million) and repair stations \$99,200 (present value, \$69,600) over the next ten years. On average, the economic impact is minimal; it will cost each individual certificated air carrier \$67 per year and each repair station \$2 per year for these changes. Therefore, we certify that this action will not have a significant economic impact on a substantial number of small entities.

### **International Trade Impact Statement**

The Office of Management and Budget directs the FAA to assess whether or not a regulatory change would affect international trade. We determined that the provisions of this rule will have no impact on trade for U.S. firms doing business in foreign countries and foreign firms doing business in the United States.

#### **Unfunded Mandates Reform Act**

The Unfunded Mandates Reform Act of 1995 (2 U.S.C. §§1532-1538) requires the FAA to assess the effects of Federal regulatory actions on state, local, and tribal governments, and on the private sector of rules that contain a Federal intergovernmental or private sector mandate that exceeds \$100 million in any one year. This action does not contain such a mandate.

#### **Paperwork Reduction Act**

This final rule contains information collections that are subject to review by OMB under the Paperwork Reduction Act of 1995 (Pub. L. 104-13). The request for review and approval has been submitted to OMB. An opportunity for comment on the paperwork portion of this rule was not provided during the NPRM stage. Therefore, there is a 60-day comment period attached to this final rule. The title, description, respondents, and description of the annual burden are shown below.

**Title:** Service Difficulty Reports.

**Description:** Under current regulations, certificate holders operating under parts 121, 125, and 135 and part 145 certificated domestic and foreign repair stations are required to report service difficulties to the FAA. The objective of the revisions to the rule is to update and improve the reporting system to effectively collect and disseminate clear and concise safety information to the aviation industry. This will be done through a

series of changes that include:

- permitting part 121, 125, and 135 certificate holders to authorize a repair station to submit an SDR on their behalf;
- eliminating dual reporting from both air carriers and repair stations;
- reducing the Principal Maintenance Inspector's (PMI's) workload;
- requiring that each SDR include a unique control number for an occurrence; and
- adding some additional reporting requirements for part 121, 125, and 135 certificate holders on information that has not been collected before or had been collected through voluntary reporting.

**Description of Respondents:** This rule will constitute a recordkeeping burden for certificate holders operating under parts 121, 125, and 135, and part 145 certificated repair stations that currently must report service difficulties. The FAA notes that the current service difficulty reporting requirements were approved under OMB assigned Control Numbers 2120–0008, 2120–0085, 2120–0003, and 2120–0039.

The FAA expects that this rule will affect 156 part 121 certificated air carriers, 2,940 part 125 and 135 certificated air carriers, and 4,599 part 145 certificated repair stations. The final rule, while imposing additional reporting and recordkeeping requirements on those operators, will have the following impacts on these businesses:

- allowing a repair station to file an SDR on behalf of a certificate holder operating under part 121, 125, or 135 (saving 216 hours annually); and
- requiring certificate holders to report certain additional service difficulties and include new information in the SDR (adding 6,225 hours annually for air carriers and 98 hours annually for repair stations).

Accordingly, the FAA estimates that this rule will increase the reporting and paperwork requirements for industry by 6,107 hours annually [calculation:  $6,225 + 98 - 216 = 6,107$ . hours annually]. The total annual reporting burden costs sums to \$168,800. These cost figures are based on estimates provided in the FAA's "Regulatory Analysis."

An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. Therefore, the FAA is soliciting comments to (i) Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility; (ii) Evaluate the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used; (iii) Enhance the quality, utility, and clarity of the information to be collected; and (iv) minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated electronic, mechanical or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses.

When an OMB control number is assigned, notification of that number will be published in the Federal Register.

### **International Compatibility**

In keeping with U.S. obligations under the Convention on International Civil Aviation, it is FAA policy to comply with International Civil Aviation Organization (ICAO) Standards and Recommended Practices to the maximum extent practicable. The FAA has determined that there are some differences with ICAO Standards and



Recommended Practices.

### **Executive Order 13132, Federalism**

The FAA has analyzed this rule under the principles and criteria of Executive Order 13132, Federalism. We have determined that this action will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, we have determined that this final rule does not have federalism implications.

### **Environmental Analysis**

FAA Order 1050.1D defines FAA actions that may be categorically excluded from preparation of a National Environmental Policy Act (NEPA) environmental impact statement. In accordance with FAA Order 1050.1D, appendix 4, paragraph 4(j), this rulemaking action qualifies for a categorical exclusion.

### **Energy Impact**

The energy impact of this final rule has been assessed in accordance with the Energy Policy and Conservation Act (EPCA), P.L. 94-163, as amended (43 U.S.C. 6362) and FAA Order 1053.1. It has been determined that the final rule is not a major regulatory action under the provisions of the EPCA.

### **List of Subjects**

#### **14 CFR Part 121**

Air carriers, Aircraft, Aviation safety, Reporting and recordkeeping requirements, Safety, Transportation.

#### **14 CFR Part 125**

Aircraft, Aviation safety, Reporting and recordkeeping requirements.

14 CFR Part 135

Air taxis, Aircraft, Aviation safety, Reporting and recordkeeping requirements.

14 CFR Part 145

Aircraft, Aviation safety, Reporting and recordkeeping requirements.

**The Amendment**

In consideration of the foregoing, the Federal Aviation Administration amends  
14 CFR parts 121, 125, 135, and 145 as follows:

**PART 121—OPERATING REQUIREMENTS: DOMESTIC, FLAG,  
AND SUPPLEMENTAL OPERATIONS**

1. The authority citation for part 121 continues to read as follows:

**Authority:** 49 U.S.C. 106(g), 40113, 40119, 44101, 44701–44702, 44705,  
44709–44711, 44713, 44716–44717, 44722, 44901, 44903–44904, 44912, 46105.

2. Amend §121.703 by revising the section heading and paragraphs (a), (c), (d),  
(e), and (f); redesignating paragraphs (g) and (h) as paragraphs (h) and (i) respectively;  
revising newly redesignated paragraph (i); and by adding a new paragraph (g) to read as  
follows:

**§121.703 Service difficulty reports (operational).**

(a) Each certificate holder shall report the occurrence or detection of each failure,  
malfunction, or defect concerning—

(1) Any fire and, when monitored by a related  
fire-warning system, whether the fire-warning system functioned properly;

- (2) Any false warning of fire or smoke;
- (3) An engine exhaust system that causes damage to the engine, adjacent structure, equipment, or components;
- (4) An aircraft component that causes the accumulation or circulation of smoke, vapor, or toxic or noxious fumes;
- (5) Any engine flameout or shutdown during flight or ground operations;
- (6) A propeller feathering system or ability of the system to control overspeed;
- (7) A fuel or fuel-dumping system that affects fuel flow or causes hazardous leakage;
- (8) A landing gear extension or retraction, or the opening or closing of landing gear doors during flight;
- (9) Any brake system component that results in any detectable loss of brake actuating force when the aircraft is in motion on the ground;
- (10) Any aircraft component or system that results in a rejected takeoff after initiation of the takeoff roll or the taking of emergency actions, as defined by the Aircraft Flight Manual or Pilot's Operating Handbook;
- (11) Any emergency evacuation system or component including any exit door, passenger emergency evacuation lighting system, or evacuation equipment found to be defective or that fails to perform the intended function during an actual emergency or during training, testing, maintenance, demonstrations, or inadvertent deployments; and
- (12) Autothrottle, autoflight, or flight control systems or components of these systems.

\* \* \* \* \*

(c) In addition to the reports required by paragraph (a) of this section, each certificate holder shall report any other failure, malfunction, or defect in an aircraft, system, component, or powerplant that occurs or is detected at any time if that failure, malfunction, or defect has endangered or may endanger the safe operation of an aircraft.

(d) Each certificate holder shall submit each report required by this section, covering each 24-hour period beginning at 0900 local time of each day and ending at 0900 local time on the next day, to a centralized collection point as specified by the Administrator. Each report of occurrences during a 24-hour period shall be submitted to the FAA within the next 96 hours. However, a report due on Saturday or Sunday may be submitted on the following Monday, and a report due on a holiday may be submitted on the next workday. Each certificate holder also shall make the report data available for 30 days for examination by the certificate-holding district office in a form and manner acceptable to the Administrator.

(e) The certificate holder shall submit the reports required by this section on a form or in another format acceptable to the Administrator. The reports shall include the following information:

- (1) The manufacturer, model, and serial number of the aircraft, engine, or propeller;
- (2) The registration number of the aircraft;
- (3) The operator designator;
- (4) The date on which the failure, malfunction, or defect was discovered;
- (5) The stage of flight or ground operation during which the failure, malfunction, or defect was discovered;

- (6) The nature of the failure, malfunction, or defect;
  - (7) The applicable Joint Aircraft System/Component Code;
  - (8) The total cycles, if applicable, and total time of the aircraft, aircraft engine, propeller, or component;
  - (9) The manufacturer, manufacturer part number, part name, serial number, and location of the component that failed, malfunctioned, or was defective, if applicable;
  - (10) The manufacturer, manufacturer part number, part name, serial number, and location of the part that failed, malfunctioned, or was defective, if applicable;
  - (11) The precautionary or emergency action taken;
  - (12) Other information necessary for a more complete analysis of the cause of the failure, malfunction, or defect, including available information pertaining to type designation of the major component and the time since the last maintenance overhaul, repair, or inspection; and
  - (13) A unique control number for the occurrence, in a form acceptable to the Administrator.
- (f) A certificate holder that also is the holder of a Type Certificate (including a Supplemental Type Certificate), a Parts Manufacturer Approval, or a Technical Standard Order authorization, or that is a licensee of a Type Certificate holder, need not report a failure, malfunction, or defect under this section if the failure, malfunction, or defect has been reported by that certificate holder under §21.3 of this chapter or under the accident reporting provisions of 49 CFR part 830.
- (g) A report required by this section may be submitted by a certificated repair station when the reporting task has been assigned to that repair station by a part 121

certificate holder. However, the part 121 certificate holder remains primarily responsible for ensuring compliance with the provisions of this section. The part 121 certificate holder shall receive a copy of each report submitted by the repair station.

(h) No person may withhold a report required by this section although all information required by this section is not available.

(i) When a certificate holder gets supplemental information to complete the report required by this section, the certificate holder shall expeditiously submit that information as a supplement to the original report and use the unique control number from the original report.

3. Add §121.704 to read as follows:

**§121.704 Service difficulty reports (structural).**

(a) Each certificate holder shall report the occurrence or detection of each failure or defect related to—

(1) Corrosion, cracks, or disbonding that requires replacement of the affected part;

(2) Corrosion, cracks, or disbonding that requires rework or blendout because the corrosion, cracks, or disbonding exceeds the manufacturer's established allowable damage limits;

(3) Cracks, fractures, or disbonding in a composite structure that the equipment manufacturer has designated as a primary structure or a principal structural element; or

(4) Repairs made in accordance with approved data not contained in the manufacturer's maintenance manual.

(b) In addition to the reports required by paragraph (a) of this section, each

certificate holder shall report any other failure or defect in aircraft structure that occurs or is detected at any time if that failure or defect has endangered or may endanger the safe operation of an aircraft.

(c) Each certificate holder shall submit each report required by this section, covering each 24-hour period beginning at 0900 local time of each day and ending at 0900 local time on the next day, to a centralized collection point as specified by the Administrator. Each report of occurrences during a 24-hour period shall be submitted to the FAA within the next 96 hours. However, a report due on Saturday or Sunday may be submitted on the following Monday, and a report due on a holiday may be submitted on the next workday. Each certificate holder also shall make the report data available for 30 days for examination by the certificate-holding district office in a form and manner acceptable to the Administrator.

(d) The certificate holder shall submit the reports required by this section on a form or in another format acceptable to the Administrator. The reports shall include the following information:

- (1) The manufacturer, model, serial number, and registration number of the aircraft;
- (2) The operator designator;
- (3) The date on which the failure or defect was discovered;
- (4) The stage of ground operation during which the failure or defect was discovered;
- (5) The part name, part condition, and location of the failure or defect;
- (6) The applicable Joint Aircraft System/Component Code;

(7) The total cycles, if applicable, and total time of the aircraft;

(8) Other information necessary for a more complete analysis of the cause of the failure or defect, including corrosion classification, if applicable, or crack length and available information pertaining to type designation of the major component and the time since the last maintenance overhaul, repair, or inspection; and

(9) A unique control number for the occurrence, in a form acceptable to the Administrator.

(e) A certificate holder that also is the holder of a Type Certificate (including a Supplemental Type Certificate), a Parts Manufacturer Approval, or a Technical Standard Order authorization, or that is a licensee of a Type Certificate holder, need not report a failure or defect under this section if the failure or defect has been reported by that certificate holder under §21.3 of this chapter or under the accident reporting provisions of 49 CFR part 830.

(f) A report required by this section may be submitted by a certificated repair station when the reporting task has been assigned to that repair station by the part 121 certificate holder. However, the part 121 certificate holder remains primarily responsible for ensuring compliance with the provisions of this section. The part 121 certificate holder shall receive a copy of each report submitted by the repair station.

(g) No person may withhold a report required by this section although all information required by this section is not available.



(h) When a certificate holder gets supplemental information to complete the report required by this section, the certificate holder shall expeditiously submit that information as a supplement to the original report and use the unique control number from the original report.

4. Revise §121.705 to read as follows:

**§121.705 Mechanical interruption summary report.**

Each certificate holder shall submit to the Administrator, before the end of the 10th day of the following month, a summary report for the previous month of each interruption to a flight, unscheduled change of aircraft en route, unscheduled stop or diversion from a route, or unscheduled engine removal caused by known or suspected mechanical difficulties or malfunctions that are not required to be reported under §121.703 or §121.704 of this part.

**PART 125-CERTIFICATION AND OPERATIONS: AIRPLANES HAVING A SEATING CAPACITY OF 20 OR MORE PASSENGERS OR A MAXIMUM PAYLOAD CAPACITY OF 6,000 POUNDS OR MORE; AND RULES GOVERNING PERSONS ON BOARD SUCH AIRCRAFT**

5. The authority citation for part 125 continues to read as follows:

**Authority:** 49 U.S.C. 106(g), 40113, 44701–44702, 44705, 44710–44711, 44713, 44716–44717, 44722.

6. Revise §125.409 to read as follows:

**§125.409 Service difficulty reports (operational).**

(a) Each certificate holder shall report the occurrence or detection of each failure, malfunction, or defect concerning—

(1) Any fire and, when monitored by a related

fire-warning system, whether the fire-warning system functioned properly;

(2) Any false warning of fire or smoke;

(3) An engine exhaust system that causes damage to the engine, adjacent structure, equipment, or components;

(4) An aircraft component that causes the accumulation or circulation of smoke, vapor, or toxic or noxious fumes;

(5) Any engine flameout or shutdown during flight or ground operations;

(6) A propeller feathering system or ability of the system to control overspeed;

(7) A fuel or fuel-dumping system that affects fuel flow or causes hazardous leakage;

(8) A landing gear extension or retraction, or the opening or closing of landing gear doors during flight;

(9) Any brake system component that results in any detectable loss of brake actuating force when the aircraft is in motion on the ground;

(10) Any aircraft component or system that results in a rejected takeoff after initiation of the takeoff roll or the taking of emergency actions, as defined by the Aircraft Flight Manual or Pilot's Operating Handbook;

(11) Any emergency evacuation system or component including any exit door, passenger emergency evacuation lighting system, or evacuation equipment found to be defective or that fails to perform the intended function during an actual emergency or during training, testing, maintenance, demonstrations, or inadvertent deployments; and

(12) Autothrottle, autoflight, or flight control systems or components of these systems.

(b) For the purposes of this section, *during flight* means the period from the moment the aircraft leaves the surface of the earth on takeoff until it touches down on landing.

(c) In addition to the reports required by paragraph (a) of this section, each certificate holder shall report any other failure, malfunction, or defect in an aircraft, system, component, or powerplant that occurs or is detected at any time if that failure, malfunction, or defect has endangered or may endanger the safe operation of an aircraft.

(d) Each certificate holder shall submit each report required by this section, covering each 24-hour period beginning at 0900 local time of each day and ending at 0900 local time on the next day, to a centralized collection point as specified by the Administrator. Each report of occurrences during a 24-hour period shall be submitted to the FAA within the next 96 hours. However, a report due on Saturday or Sunday may be submitted on the following Monday, and a report due on a holiday may be submitted on the next workday. For aircraft operating in areas where mail is not collected, reports may be submitted within 24 hours after the aircraft returns to a point where the mail is collected. Each certificate holder also shall make the report data available for 30 days for examination by the certificate-holding district office in a form and manner acceptable to the Administrator.

(e) The certificate holder shall submit the reports required by this section on a form or in another format acceptable to the Administrator. The reports shall include the following information:

(1) The manufacturer, model, and serial number of the aircraft, engine, or propeller;

- (2) The registration number of the aircraft;
  - (3) The operator designator;
  - (4) The date on which the failure, malfunction, or defect was discovered;
  - (5) The stage of flight or ground operation during which the failure, malfunction, or defect was discovered;
  - (6) The nature of the failure, malfunction, or defect;
  - (7) The applicable Joint Aircraft System/Component Code;
  - (8) The total cycles, if applicable, and total time of the aircraft, aircraft engine, propeller, or component;
  - (9) The manufacturer, manufacturer part number, part name, serial number, and location of the component that failed, malfunctioned, or was defective, if applicable;
  - (10) The manufacturer, manufacturer part number, part name, serial number, and location of the part that failed, malfunctioned, or was defective, if applicable;
  - (11) The precautionary or emergency action taken;
  - (12) Other information necessary for a more complete analysis of the cause of the failure, malfunction, or defect, including available information pertaining to type designation of the major component and the time since the last maintenance overhaul, repair, or inspection; and
  - (13) A unique control number for the occurrence, in a form acceptable to the Administrator.
- (f) A certificate holder that also is the holder of a Type Certificate (including a Supplemental Type Certificate), a Parts Manufacturer Approval, or a Technical Standard Order authorization, or that is a licensee of a Type Certificate holder, need not report a

failure, malfunction, or defect under this section if the failure, malfunction, or defect has been reported by that certificate holder under §21.3 of this chapter or under the accident reporting provisions of 49 CFR part 830.

(g) A report required by this section may be submitted by a certificated repair station when the reporting task has been assigned to that repair station by a part 125 certificate holder. However, the part 125 certificate holder remains primarily responsible for ensuring compliance with the provisions of this section. The part 125 certificate holder shall receive a copy of each report submitted by the repair station.

(h) No person may withhold a report required by this section although all information required by this section is not available.

(i) When a certificate holder gets supplemental information to complete the report required by this section, the certificate holder shall expeditiously submit that information as a supplement to the original report and use the unique control number from the original report.

7. Add §125.410 to read as follows:

**§125.410 Service difficulty reports (structural).**

(a) Each certificate holder shall report the occurrence or detection of each failure or defect related to—

(1) Corrosion, cracks, or disbonding that requires replacement of the affected part;

(2) Corrosion, cracks, or disbonding that requires rework or blendout because the corrosion, cracks, or disbonding exceeds the manufacturer's established allowable damage limits;

(3) Cracks, fractures, or disbonding in a composite structure that the equipment manufacturer has designated as a primary structure or a principal structural element; or

(4) Repairs made in accordance with approved data not contained in the manufacturer's maintenance manual.

(b) In addition to the reports required by paragraph (a) of this section, each certificate holder shall report any other failure or defect in aircraft structure that occurs or is detected at any time if that failure or defect has endangered or may endanger the safe operation of an aircraft.

(c) Each certificate holder shall submit each report required by this section, covering each 24-hour period beginning at 0900 local time of each day and ending at 0900 local time on the next day, to a centralized collection point as specified by the Administrator. Each report of occurrences during a 24-hour period shall be submitted to the FAA within the next 96 hours. However, a report due on Saturday or Sunday may be submitted on the following Monday, and a report due on a holiday may be submitted on the next workday. For aircraft operating in areas where mail is not collected, reports may be submitted within 24 hours after the aircraft returns to a point where the mail is collected. Each certificate holder also shall make the report data available for 30 days for examination by the certificate-holding district office in a form and manner acceptable to the Administrator.

(d) The certificate holder shall submit the reports required by this section on a form or in another format acceptable to the Administrator. The reports shall include the following information:

(1) The manufacturer, model, serial number, and registration number of the

aircraft;

(2) The operator designator;

(3) The date on which the failure or defect was discovered;

(4) The stage of ground operation during which the failure or defect was discovered;

(5) The part name, part condition, and location of the failure or defect;

(6) The applicable Joint Aircraft System/Component Code;

(7) The total cycles, if applicable, and total time of the aircraft;

(8) Other information necessary for a more complete analysis of the cause of the failure or defect, including corrosion classification, if applicable, or crack length and available information pertaining to type designation of the major component and the time since the last maintenance overhaul, repair, or inspection; and

(9) A unique control number for the occurrence, in a form acceptable to the Administrator.

(e) A certificate holder that also is the holder of a Type Certificate (including a Supplemental Type Certificate), a Parts Manufacturer Approval, or a Technical Standard Order authorization, or that is a licensee of a Type Certificate holder, need not report a failure or defect under this section if the failure or defect has been reported by that certificate holder under §21.3 of this chapter or under the accident reporting provisions of 49 CFR part 830.

(f) A report required by this section may be submitted by a certificated repair station when the reporting task has been assigned to that repair station by the part 125 certificate holder. However, the part 125 certificate holder remains primarily responsible

for ensuring compliance with the provisions of this section. The part 125 certificate holder shall receive a copy of each report submitted by the repair station.

(g) No person may withhold a report required by this section although all information required by this section is not available.

(h) When a certificate holder gets supplemental information to complete the report required by this section, the certificate holder shall expeditiously submit that information as a supplement to the original report and use the unique control number from the original report.

**PART 135—OPERATING REQUIREMENTS: COMMUTER AND ON-DEMAND  
OPERATIONS AND RULES GOVERNING PERSONS ON BOARD SUCH  
AIRCRAFT**

8. The authority citation for part 135 continues to read as follows:

**Authority:** 49 U.S.C. 106(g), 40113, 44701–44702, 44705, 44709, 44711–44713, 44715–44717, 44722.

9. Amend §135.415 by revising the section heading and paragraphs (a), (c), (d), (e), and (f); redesignating paragraphs (g) and (h) as paragraphs (h) and (i) respectively; revising newly redesignated paragraph (i); and by adding a new paragraph (g) to read as follows:

**§ 135.415 Service difficulty reports (operational).**

(a) Each certificate holder shall report the occurrence or detection of each failure, malfunction, or defect concerning—

(1) Any fire and, when monitored by a related fire-warning system, whether the fire-warning system functioned properly;



- (2) Any false warning of fire or smoke;
- (3) An engine exhaust system that causes damage to the engine, adjacent structure, equipment, or components;
- (4) An aircraft component that causes the accumulation or circulation of smoke, vapor, or toxic or noxious fumes;
- (5) Any engine flameout or shutdown during flight or ground operations;
- (6) A propeller feathering system or ability of the system to control overspeed;
- (7) A fuel or fuel-dumping system that affects fuel flow or causes hazardous leakage;
- (8) A landing gear extension or retraction, or the opening or closing of landing gear doors during flight;
- (9) Any brake system component that results in any detectable loss of brake actuating force when the aircraft is in motion on the ground;
- (10) Any aircraft component or system that results in a rejected takeoff after initiation of the takeoff roll or the taking of emergency action, as defined by the Aircraft Flight Manual or Pilot's Operating Handbook;
- (11) Any emergency evacuation system or component including any exit door, passenger emergency evacuation lighting system, or evacuation equipment found to be defective, or that fails to perform the intended function during an actual emergency or during training, testing, maintenance, demonstrations, or inadvertent deployments; and
- (12) Autothrottle, autoflight, or flight control systems or components of these systems.

\* \* \* \* \*

(c) In addition to the reports required by paragraph (a) of this section, each certificate holder shall report any other failure, malfunction, or defect in an aircraft, system, component, or powerplant that occurs or is detected at any time if that failure, malfunction, or defect has endangered or may endanger the safe operation of an aircraft.

(d) Each certificate holder shall submit each report required by this section, covering each 24-hour period beginning at 0900 local time of each day and ending at 0900 local time on the next day, to a centralized collection point as specified by the Administrator. Each report of occurrences during a 24-hour period shall be submitted to the FAA within the next 96 hours. However, a report due on Saturday or Sunday may be submitted on the following Monday, and a report due on a holiday may be submitted on the next workday. For aircraft operating in areas where mail is not collected, reports may be submitted within 24 hours after the aircraft returns to a point where the mail is collected. Each certificate holder also shall make the report data available for 30 days for examination by the certificate-holding district office in a form and manner acceptable to the Administrator.

(e) The certificate holder shall submit the reports required by this section on a form or in another format acceptable to the Administrator. The reports shall include the following information:

- (1) The manufacturer, model, and serial number of the aircraft, engine, or propeller;
- (2) The registration number of the aircraft;
- (3) The operator designator;
- (4) The date on which the failure, malfunction, or defect was discovered;

(5) The stage of flight or ground operation during which the failure, malfunction, or defect was discovered;

(6) The nature of the failure, malfunction, or defect;

(7) The applicable Joint Aircraft System/Component Code;

(8) The total cycles, if applicable, and total time of the aircraft, aircraft engine, propeller, or component;

(9) The manufacturer, manufacturer part number, part name, serial number, and location of the component that failed, malfunctioned, or was defective, if applicable;

(10) The manufacturer, manufacturer part number, part name, serial number, and location of the part that failed, malfunctioned, or was defective, if applicable;

(11) The precautionary or emergency action taken;

(12) Other information necessary for more complete analysis of the cause of the failure, malfunction, or defect, including available information pertaining to type designation of the major component and the time since the last maintenance overhaul, repair, or inspection; and

(13) A unique control number for the occurrence, in a form acceptable to the Administrator.

(f) A certificate holder that also is the holder of a Type Certificate (including a Supplemental Type Certificate), a Parts Manufacturer Approval, or a Technical Standard Order authorization, or that is a licensee of a Type Certificate holder, need not report a failure, malfunction, or defect under this section if the failure, malfunction, or defect has been reported by that certificate holder under § 21.3 of this chapter or under the accident reporting provisions of 49 CFR part 830.

(g) A report required by this section may be submitted by a certificated repair station when the reporting task has been assigned to that repair station by a part 135 certificate holder. However, the part 135 certificate holder remains primarily responsible for ensuring compliance with the provisions of this section. The part 135 certificate holder shall receive a copy of each report submitted by the repair station.

(h) No person may withhold a report required by this section although all information required by this section is not available.

(i) When a certificate holder gets supplemental information to complete the report required by this section, the certificate holder shall expeditiously submit that information as a supplement to the original report and use the unique control number from the original report.

10. Add §135.416 to read as follows:

**§135.416 Service difficulty reports (structural).**

(a) Each certificate holder shall report the occurrence or detection of each failure or defect related to—

(1) Corrosion, cracks, or disbonding that requires replacement of the affected part;

(2) Corrosion, cracks, or disbonding that requires rework or blendout because the corrosion, cracks, or disbonding exceeds the manufacturer's established allowable damage limits;

(3) Cracks, fractures, or disbonding in a composite structure that the equipment manufacturer has designated as a primary structure or a principal structural element; or

(4) Repairs made in accordance with approved data not contained in the

manufacturer's maintenance manual.

(b) In addition to the reports required by paragraph (a) of this section, each certificate holder shall report any other failure or defect in aircraft structure that occurs or is detected at any time if that failure or defect has endangered or may endanger the safe operation of an aircraft.

(c) Each certificate holder shall submit each report required by this section, covering each 24-hour period beginning at 0900 local time of each day and ending at 0900 local time on the next day, to a centralized collection point as specified by the Administrator. Each report of occurrences during a 24-hour period shall be submitted to the FAA within the next 96 hours. However, a report due on Saturday or Sunday may be submitted on the following Monday, and a report due on a holiday may be submitted on the next workday. For aircraft operating in areas where mail is not collected, reports may be submitted within 24 hours after the aircraft returns to a point where the mail is collected. Each certificate holder also shall make the report data available for 30 days for examination by the certificate-holding district office in a form and manner acceptable to the Administrator.

(d) The certificate holder shall submit the reports required by this section on a form or in another format acceptable to the Administrator. The reports shall include the following information:

- (1) The manufacturer, model, serial number, and registration number of the aircraft;
- (2) The operator designator;
- (3) The date on which the failure or defect was discovered;

- (4) The stage of ground operation during which the failure or defect was discovered;
  - (5) The part name, part condition, and location of the failure or defect;
  - (6) The applicable Joint Aircraft System/Component Code;
  - (7) The total cycles, if applicable, and total time of the aircraft;
  - (8) Other information necessary for a more complete analysis of the cause of the failure or defect, including corrosion classification, if applicable, or crack length and available information pertaining to type designation of the major component and the time since the last maintenance overhaul, repair, or inspection; and
  - (9) A unique control number for the occurrence, in a form acceptable to the Administrator.
- (e) A certificate holder that also is the holder of a Type Certificate (including a Supplemental Type Certificate), a Parts Manufacturer Approval, or a Technical Standard Order authorization, or that is a licensee of a Type Certificate holder, need not report a failure or defect under this section if the failure or defect has been reported by that certificate holder under §21.3 of this chapter or under the accident reporting provisions of 49 CFR part 830.
- (f) A report required by this section may be submitted by a certificated repair station when the reporting task has been assigned to that repair station by the part 135 certificate holder. However, the part 135 certificate holder remains primarily responsible for ensuring compliance with the provisions of this section. The part 135 certificate holder shall receive a copy of each report submitted by the repair station.
- (g) No person may withhold a report required by this section although all

information required by this section is not available.

(h) When a certificate holder gets supplemental information to complete the report required by this section, the certificate holder shall expeditiously submit that information as a supplement to the original report and use the unique control number from the original report.

11. Revise §135.417 to read as follows:

**§135.417 Mechanical interruption summary report.**

Each certificate holder shall submit to the Administrator, before the end of the 10th day of the following month, a summary report for the previous month of each interruption to a flight, unscheduled change of aircraft en route, unscheduled stop or diversion from a route, or unscheduled engine removal caused by known or suspected mechanical difficulties or malfunctions that are not required to be reported under §135.415 or §135.416 of this part.

**PART 145—REPAIR STATIONS**

12. The authority citation for part 145 continues to read as follows:

**Authority:** 49 U.S.C. 106(g), 40113, 44701-44702, 44707, 44717.

13. Amend §145.63 by revising paragraphs (a) and (c) and adding paragraphs (d) and (e) to read as follows:

**§145.63 Reports of defects or unairworthy conditions.**

(a) Each certificated domestic repair station shall, within 96 hours after it discovers any serious defect in, or other recurring unairworthy condition of, an aircraft, powerplant, or propeller, or any component of any of them, submit a report to a central

collection point as specified by the Administrator. The report shall be made on a form or in another format acceptable to the Administrator, describing the defect or unairworthy condition completely without withholding any pertinent information.

\* \* \* \* \*

(c) The holder of a domestic repair station certificate that also is the holder of a part 121, part 125, or part 135 certificate, a Type Certificate (including a Supplemental Type Certificate), a Parts Manufacturer Approval, or a Technical Standard Order Authorization, or that is the licensee of a Type Certificate holder, need not report a failure, malfunction, or defect under this section if the failure, malfunction, or defect has been reported by it under §21.3, §121.703, §121.704, §125.409, §125.410, §135.415, or §135.416 of this chapter.

(d) A certificated domestic repair station may submit a Service Difficulty Report (operational or structural) for—

(1) A part 121 certificate holder under §121.703(g) or §121.704(f) provided that the report meets the requirements of §§121.703(d) and 121.703(e), or §§121.704(c) and 121.704(d) of this chapter, as appropriate;

(2) A part 125 certificate holder under §125.409(g) or §125.410(f) provided that the report meets the requirements of §§ 125.409(d) and 125.409(e), or §§125.410(c) and 125.410(d) of this chapter, as appropriate;

(3) A part 135 certificate holder under §135.415(g) or §135.416(f) provided that the report meets the requirements of §§135.415(d) and 135.415(e), or §§135.416(c) and 135.416(d) of this chapter, as appropriate.

(e) A certificated domestic repair station authorized to report a failure,



malfunction, or defect under paragraph (d) of this section shall not report the same failure, malfunction, or defect under paragraph (a) of this section. A copy of the report submitted under paragraph (d) of this section shall be forwarded to the certificate holder.

14. Amend §145.79 by revising paragraphs (c) and (d) and adding paragraphs (e) and (f) to read as follows:

**§145.79 Records and reports.**

\* \* \* \* \*

(c) Each certificated foreign repair station shall, within 96 hours after it discovers any serious defect in, or other recurring unairworthy condition of, any aircraft, powerplant, propeller, or any component of any of them, submit a report to a central collection point as specified by the Administrator. The report shall be made on a form or another format acceptable to the Administrator, describing the defect or unairworthy condition completely without withholding any pertinent information.

(d) The holder of a foreign repair station certificate that also is the holder of a Type Certificate (including a Supplemental Type Certificate), a Parts Manufacturer Approval, or a Technical Standard Order Authorization or that is the licensee of a Type Certificate holder need not report a failure, malfunction, or defect under this section if the failure, malfunction, or defect has been reported by it under §21.3 of this chapter.

(e) A certificated foreign repair station may submit a Service Difficulty Report (operational or structural) for—

(1) A part 121 certificate holder under §121.703(g) or §121.704(f) provided that the report meets the requirements of §§121.703(d) and 121.703(e) or §§121.704(c) and 121.704(d) of this chapter, as appropriate;

(2) A part 125 certificate holder under §125.409(g) or §125.410(f) provided that the report meets the requirements of §§125.409(d) and 125.409(e) or §§125.410(c) and 125.410(d) of this chapter, as appropriate;

(3) A part 135 certificate holder under §135.415(g) or §135.416(f) provided that the report meets the requirements of §§135.415(d) and 135.415(e) or §§135.416(c) and 135.416(d) of this chapter, as appropriate.

(f) A certificated foreign repair station authorized to report a failure, malfunction, or defect under paragraph (e) of this section shall not report the same failure, malfunction, or defect under paragraph (c) of this section. A copy of the report submitted under paragraph (e) of this section shall be forwarded to the certificate holder.

Issued in Washington, D.C., on September 8, 2000.

/S/ Jane F. Garvey  
Administration